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=> file casreact
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FILE CONTENT:1840 - 14 May 2006 VOL 144 ISS 20

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************************************************************
*                                                          *
*     CASREACT now has more than 10 million reactions      *
*                                                          *
************************************************************

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database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance
identification.

=> d que
L1             2 SEA FILE=CASREACT AMLODIPINE AND TARTARIC(W)ACID


=> d l1 1-2 ibib abs fcrd


L1   ANSWER 1 OF 2  CASREACT  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         143:43779  CASREACT
TITLE:                    A method for the enantiomeric separation of optical
                          active Amlodipine
INVENTOR(S):              Zhong, Nanping; Zhao, Xianfeng; Ma, Hui; Chen, Yujie
PATENT ASSIGNEE(S):       Shijiazhuang Pharmaceutical Group Ouyi Pharma. Co.,
                          Ltd., Peop. Rep. China
SOURCE:                   PCT Int. Appl., 15 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 Chinese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     WO 2005054196      A1   20050616       WO 2004-CN1412   20041203
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
```

PRIORITY APPLN. INFO.: CN 2003-10119335 20031205

AB The Invention relate to the preparation of the (S)-(-)-**Amlodipine** and (R)-(+)-**Amlodipine** by means of enantiomeric separation of racemic **Amlodipine** mixture, in which, L- or D-**tartaric acid** is used as resolution agent, and organic solvent containing 2-butanone is used as solvent. The 2-butanone used in the present invention has the advantage of low b.p., low toxicity, little pollution, and the method is suitable for large-scale production

NO HIGHLIGHTING INFORMATION PRESENT

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 2 OF 2 CASREACT COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 140:287272 CASREACT

TITLE: Process for the preparation of (S)-(-)-**amlodipine** by resolution of (RS)-**amlodipine** with L-**tartaric acid**

INVENTOR(S): Chung, You-Sup; Ha, Mun-Choun

PATENT ASSIGNEE(S): Hanlim Pharmaceutical Co., Ltd., S. Korea

SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

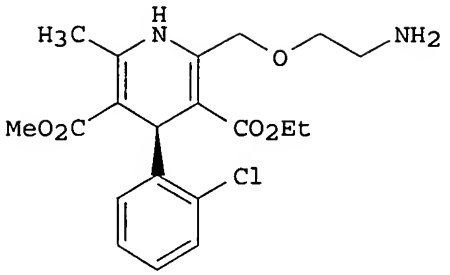
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004024689	A1	20040325	WO 2003-KR1849	20030908
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2525699	AA	20040325	CA 2003-2525699	20030908
AU 2003260983	A1	20040430	AU 2003-260983	20030908
EP 1537082	A1	20050608	EP 2003-795471	20030908
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006501264	T2	20060112	JP 2004-535251	20030908
US 2006014961	A1	20060119	US 2005-527091	20050309
PRIORITY APPLN. INFO.:			KR 2002-54808	20020911
			WO 2003-KR1849	20030908

GI



I

AB (S)-(-)-**amlodipine** I is prepared from racemic **amlodipine** by a resolution using L-(+)-**tartaric acid**; L-**tartaric acid** is much less expensive than the D-**tartaric acid** used in a previous method for the preparation of I, decreasing the cost of resolution and making resolution of I more amenable to industrial scale synthesis. 0.5-0.55 Equivalent of L-(+)-**tartaric acid** in DMSO is added to racemic I in DMSO and stirred overnight at room temperature to yield a slurry from which the precipitate is filtered; addition of methylene chloride to the filtered solution, stirring at ambient temperature for 40 h, cooling to 5° and stirring for two hours yields a precipitate of the DMSO solvate of the L-hemitartrate salt of I. The amount of DMSO present in the resolution step should be between four to six times (preferably five times) the volume of one gram of racemic **amlodipine** per g of **amlodipine** resolved, and the amount of methylene chloride added afterwards should be one to two times the amount of DMSO present. The DMSO solvate of the L-hemitartrate salt of I can be converted to the hydrate of the L-hemitartrate salt of I by refluxing in methanol to dissolve the DMSO solvate followed by overnight stirring and filtration. Treatment of a methylene chloride solution of either the DMSO solvate of the L-hemitartrate salt of I or the hydrate of the L-hemitartrate salt of I with a 2 M solution of sodium bicarbonate in water followed by cooling to 5° and filtration yields I. I is prepared on gram scale by this method.
NO HIGHLIGHTING INFORMATION PRESENT
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> => file caplus
FILE 'CAPLUS' ENTERED AT 11:09:39 ON 17 MAY 2006
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FILE COVERS 1907 - 17 May 2006 VOL 144 ISS 21

FILE LAST UPDATED: 16 May 2006 (20060516/ED)

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=> d que
L1 2 SEA FILE=CASREACT AMLODIPINE AND TARTARIC(W)ACID
L2 2 SEA FILE=CAPLUS L1

=> d l1 1-2 ibib abs hit
YOU HAVE REQUESTED DATA FROM FILE 'CASREACT' - CONTINUE? (Y)/N:n

=> d l2 1-2 ibib abs hit

L2 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:523419 CAPLUS
DOCUMENT NUMBER: **143:43779**
TITLE: A method for the enantiomeric separation of optical active Amlodipine
INVENTOR(S): Zhong, Nanping; Zhao, Xianfeng; Ma, Hui; Chen, Yujie
PATENT ASSIGNEE(S): Shijiazhuang Pharmaceutical Group Ouyi Pharma. Co., Ltd., Peop. Rep. China
SOURCE: PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005054196	A1	20050616	WO 2004-CN1412	20041203

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: CN 2003-10119335 A 20031205
OTHER SOURCE(S): CASREACT 143:43779
AB The Invention relate to the preparation of the (S)-(-)-Amlodipine and (R)-(+)-Amlodipine by means of enantiomeric separation of racemic Amlodipine mixture, in which, L- or D-tartaric acid is used as resolution agent, and organic solvent containing 2-butanone is used as solvent. The 2-butanone used in the present invention has the advantage of low b.p., low toxicity, little pollution, and the method is suitable for large-scale production
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
AN 2005:523419 CAPLUS
DN **143:43779**

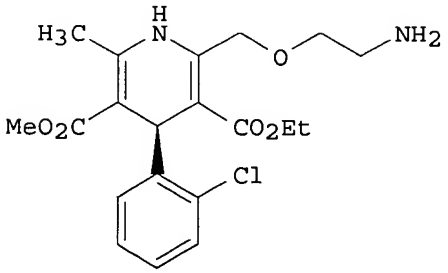
L2 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:252483 CAPLUS
DOCUMENT NUMBER: **140:287272**
TITLE: Process for the preparation of (S)-(-)-amlodipine by resolution of (RS)-amlodipine with L-tartaric acid
INVENTOR(S): Chung, You-Sup; Ha, Mun-Choun
PATENT ASSIGNEE(S): Hanlim Pharmaceutical Co., Ltd., S. Korea
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004024689	A1	20040325	WO 2003-KR1849	20030908
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2525699	AA	20040325	CA 2003-2525699	20030908
AU 2003260983	A1	20040430	AU 2003-260983	20030908
EP 1537082	A1	20050608	EP 2003-795471	20030908
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006501264	T2	20060112	JP 2004-535251	20030908
US 2006014961	A1	20060119	US 2005-527091	20050309

PRIORITY APPLN. INFO.: KR 2002-54808 A 20020911
WO 2003-KR1849 W 20030908

OTHER SOURCE(S): CASREACT 140:287272
GI



I

AB (S)-(-)-amlodipine I is prepared from racemic amlodipine by a resolution using L-(+)-tartaric acid; L-tartaric acid is much less expensive than the D-tartaric acid used in a previous method for the preparation of I, decreasing the cost of resolution and making resolution of I more amenable to industrial scale synthesis. 0.5-0.55 Equivalent of L-(+)-tartaric acid in DMSO is added to racemic I in DMSO and stirred overnight at room temperature to yield a slurry from which the precipitate is filtered; addition of methylene chloride to the

filtered solution, stirring at ambient temperature for 40 h, cooling to 5° and stirring for two hours yields a precipitate of the DMSO solvate of the L-hemitartrate salt of I. The amount of DMSO present in the resolution step should be between four to six times (preferably five times) the volume of one gram of racemic amlodipine per g of amlodipine resolved, and the amount of methylene chloride added afterwards should be one to two times the amount of DMSO present. The DMSO solvate of the L-hemitartrate salt of I can be converted to the hydrate of the L-hemitartrate salt of I by refluxing in methanol to dissolve the DMSO solvate followed by overnight stirring and filtration. Treatment of a methylene chloride solution of either the DMSO solvate of the L-hemitartrate salt of I or the hydrate of the L-hemitartrate salt of I with a 2 M solution of sodium bicarbonate in water followed by cooling to 5° and filtration yields I. I is prepared on gram scale by this method.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AN 2004:252483 CAPLUS
DN **140:287272**

=> => d l1 1-24 ibib abs hitstr

L1 ANSWER 1 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2006:41288 USPATFULL
TITLE: (S)-**Amlodipine** malate
INVENTOR(S): Laughlin, Sharon M., Hudson, MA, UNITED STATES
Bakale, Roger, Shrewsbury, MA, UNITED STATES
Wilkinson, Harold Scott, Westborough, MA, UNITED STATES
Zlota, Andrei, Sharon, MA, UNITED STATES
PATENT ASSIGNEE(S): Sepracor Inc., Marlborough, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006035940	A1	20060216
APPLICATION INFO.:	US 2005-82253	A1	20050316 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-554030P	20040316 (60)
	US 2005-649635P	20050203 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110, US
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 69 Drawing Page(s)
LINE COUNT: 2978
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB One aspect of the present invention relates to optically pure (**S**)-**amlodipine** malate. Another aspect of the present invention relates to (rac)-amlodipine malate. In a preferred embodiment, the compound is optically pure (**S**)-**amlodipine** L-malate. Another aspect of the present invention relates to a pharmaceutical composition comprising optically pure (**S**)-**amlodipine** malate. Another aspect of the present invention relates to a method of preparing optically pure (**S**)-**amlodipine** malate, comprising admixing optically pure (**S**)-**amlodipine** with malic acid. Another aspect of the present invention relates to the various polymorphic and solvated forms of optically pure (**S**)-**amlodipine** malate. In another prefered embodiment the invention

relates to polymorphic and solvated forms A-G. The present invention also relates to a method of preparing optically pure (S)-**amlodipine** malate, comprising combining a salt of optically pure (S)-**amlodipine** with a malate salt to give optically pure (S)-**amlodipine** malate. In a preferred embodiment, the malate salt is an optically pure L-malate salt.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 2 OF 24 USPATFULL on STN

ACCESSION NUMBER:	2006:34828 USPATFULL			
TITLE:	(S)-**amlodipine** malate			
INVENTOR(S):	Laughlin, Sharon M., Hudson, MA, UNITED STATES Bakale, Roger, Shrewsbury, MA, UNITED STATES Wilkinson, Harold Scott, Westborough, MA, UNITED STATES Zlota, Andrei, Sharon, MA, UNITED STATES			
PATENT ASSIGNEE(S):	Sepracor Inc., Marlborough, MA, UNITED STATES (U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006030602	A1	20060209	
APPLICATION INFO.:	US 2005-82252	A1	20050316	(11)
	NUMBER		DATE	
PRIORITY INFORMATION:	US 2004-554030P		20040316	(60)
	US 2005-649635P		20050203	(60)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110, US			
NUMBER OF CLAIMS:	24			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	67 Drawing Page(s)			
LINE COUNT:	2944			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB One aspect of the present invention relates to optically pure (S)-**amlodipine** malate. Another aspect of the present invention relates to (rac)-amlodipine malate. In a preferred embodiment, the compound is optically pure (S)-**amlodipine** L-malate. Another aspect of the present invention relates to a pharmaceutical composition comprising optically pure (S)-**amlodipine** malate. Another aspect of the present invention relates to a method of preparing optically pure (S)-**amlodipine** malate, comprising admixing optically pure (S)-**amlodipine** with malic acid. Another aspect of the present invention relates to the various polymorphic and solvated forms of optically pure (S)-**amlodipine** malate. In another prefered embodiment the invention relates to polymorphic and solvated forms A-G. The present invention also relates to a method of preparing optically pure (S)-**amlodipine** malate, comprising combining a salt of optically pure (S)-**amlodipine** with a malate salt to give optically pure (S)-**amlodipine** malate. In a preferred embodiment, the malate salt is an optically pure L-malate salt.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 3 OF 24 USPATFULL on STN

ACCESSION NUMBER:	2006:16572 USPATFULL
TITLE:	Processes for the preparation of s-(-)-**amlodipine**

10/527,091

INVENTOR(S): Chung, You Sup, Kyungki-do, KOREA, REPUBLIC OF
Ha, Mun Choun, Kyungki-do, KOREA, REPUBLIC OF
PATENT ASSIGNEE(S): HANLIM PHARMACEUTICAL CO., LTD., Seoul, KOREA, REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006014961	A1	20060119	
APPLICATION INFO.:	US 2003-527091	A1	20030908	(10)
	WO 2003-KR1849		20030908	
			20050309	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	KR 2002-54808	20020911

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ROTHWELL, FIGG, ERNST & MANBECK, P.C., 1425 K STREET, N.W., SUITE 800, WASHINGTON, DC, 20005, US
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 240
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a process for the preparation of **S**-(-)-**amlodipine** from (R,**S**)-**amlodipine** in industrial-scale using L-(+)-**tartaric acid**, which is much cheaper than D-(-)-**tartaric acid**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 4 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2006:16408 USPATFULL
TITLE: **S**-(-) -**amlodipine** nicotinate and process for the preparation thereof
INVENTOR(S): Chung, You Sup, Suwon-city, KOREA, REPUBLIC OF
Ha, Mun Choun, Yongin-city, KOREA, REPUBLIC OF
PATENT ASSIGNEE(S): Hanlim Pharmaceutical Co., Ltd., Seoul, KOREA, REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006014795	A1	20060119	
APPLICATION INFO.:	US 2003-527093	A1	20030908	(10)
	WO 2003-KR1850		20030908	
			20050309	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	KR 2002-5480	20020911
	KR	20030109

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ROTHWELL, FIGG, ERNST & MANBECK, P.C., 1425 K STREET, N.W., SUITE 800, WASHINGTON, DC, 20005, US
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 364
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a novel salt of **S**-(-)-

amlodipine, i.e., a nicotinic acid salt of **S**-(-)-**amlodipine**, a process for preparing the same, and a pharmaceutical composition comprising the same as an active ingredient.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 5 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2005:241283 USPATFULL
TITLE: Compositions comprising (**S**)-**amlodipine** malate and an angiotensin receptor blocker and methods of their use
INVENTOR(S): Grogan, Donna R., Hudson, MA, UNITED STATES
Bush, Larry R., Worcester, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005209288	A1	20050922
APPLICATION INFO.:	US 2005-33113	A1	20050112 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-535488P	20040112 (60)
	US 2004-559014P	20040405 (60)
	US 2004-628926P	20041119 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: JONES DAY, 51 Louisiana Aveue, N.W, WASHINGTON, DC, 20001-2113, US
NUMBER OF CLAIMS: 41
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1952
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A pharmaceutical composition comprising enantiomerically pure (**S**)-**amlodipine** malate, an ARB and optional other active agents, and methods of treating, preventing and managing cardiovascular diseases and disorders, and symptoms thereof, using the composition, are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 6 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2005:215586 USPATFULL
TITLE: Compositions comprising (**S**)-**amlodipine** and an angiotensin receptor blocker and methods of their use
INVENTOR(S): Grogan, Donna R., Hudson, MA, UNITED STATES
Bush, Larry R., Worcester, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005187262	A1	20050825
APPLICATION INFO.:	US 2005-33277	A1	20050112 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-535488P	20040112 (60)
	US 2004-559014P	20040405 (60)
	US 2004-628926P	20041119 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: JONES DAY, 51 Louisiana Aveue, N.W, WASHINGTON, DC,

20001-2113, US
NUMBER OF CLAIMS: 41
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1886
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A pharmaceutical composition comprising enantiomerically pure (**S**)-**amlodipine**, an ARB and optional other active agents, and methods of treating, preventing and managing cardiovascular diseases and disorders, and symptoms thereof, using the composition, are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 7 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2005:203356 USPATFULL
TITLE: Process for the preparation of [**S**(-) **amlodipine** - L (+)- hemitartarate
INVENTOR(S): Joshi, Rohini Ramesh, Maharashtra, INDIA
Joshi, Ramesh Anna, Maharashtra, INDIA
Gurjar, M. K., Pune, INDIA
PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, New Delhi, INDIA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005176781	A1	20050811
APPLICATION INFO.:	US 2004-937564	A1	20040910 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-98502, filed on 18 Mar 2002, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BURNS DOANE SWECKER & MATHIS L L P, POST OFFICE BOX 1404, ALEXANDRIA, VA, 22313-1404, US
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
LINE COUNT: 153
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a process for the preparation of [**S**(-) **amlodipine**-L(+)-hemi taratarte] from RS amlodipine base using L(+) **tartaric acid** in the presence of dimethyl sulfoxide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 8 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2005:184008 USPATFULL
TITLE: Compositions of a cyclooxygenase-2 selective inhibitor and a calcium modulating agent for the treatment of central nervous system damage
INVENTOR(S): Stephenson, Diane T., Groton, CT, UNITED STATES
Taylor, Duncan P., Bridgewater, NJ, UNITED STATES
PATENT ASSIGNEE(S): Pharmacia Corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005159403	A1	20050721
APPLICATION INFO.:	US 2004-828868	A1	20040421 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-464499P	20030422 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SENNIGER POWERS LEAVITT AND ROEDEL, ONE METROPOLITAN SQUARE, 16TH FLOOR, ST LOUIS, MO, 63102, US
NUMBER OF CLAIMS: 36
EXEMPLARY CLAIM: 1
LINE COUNT: 9421
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides compositions and methods for the treatment of central nervous system damage in a subject. More particularly, the invention provides a combination therapy for the treatment of a vaso-occlusive event, such as a stroke, comprising the administration to a subject of a calcium modulating agent and a cyclooxygenase-2 selective inhibitor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 9 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2005:18962 USPATFULL
TITLE: Process for preparation of chiral amlodipine salts
INVENTOR(S): Joshi, Rohini R., Maharashtra, INDIA
Joshi, Ramesh A., Maharashtra, INDIA
Karade, Nilesh B., Maharashtra, INDIA
Gurjar, Mukund K., Maharashtra, INDIA
PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, New Delhi, INDIA (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6846932	B1	20050125	
APPLICATION INFO.:	US 2003-718267		20031120	(10)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Morris, Patricia L.
LEGAL REPRESENTATIVE: Darby & Darby
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 380
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A process for the preparation of pharmaceutically acceptable salts of chiral Amlodipine namely **S**(-) **Amlodipine** and R(+) Amlodipine from without isolation of a free base from with optical purity rank between 96-99% is described in the present invention. The process comprises resolving RS amlodipine base using of L(+) or D(-) **tartaric acid** to obtain salt of corresponding to the acid used in ee rang from 96-99%.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 10 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2005:11752 USPATFULL
TITLE: Method of resolving amlodipine racemate
INVENTOR(S): Senanayake, Chris H., Brookfield, CT, UNITED STATES
Tanoury, Gerald J., Hudson, MA, UNITED STATES
Wilkinson, Harold S., Marlborough, MA, UNITED STATES
Bakale, Roger P., Shrewsbury, MA, UNITED STATES
Zlota, Andrei A., Sharon, MA, UNITED STATES
Saranteas, Kostas, Peabody, MA, UNITED STATES
PATENT ASSIGNEE(S): Sepracor Inc., Marlborough, MA (U.S. corporation)

	NUMBER	KIND	DATE

PATENT INFORMATION: US 2005009887 A1 20050113
APPLICATION INFO.: US 2004-911361 A1 20040804 (10)
RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-325686, filed on 20 Dec 2002, GRANTED, Pat. No. US 6822099
Continuation-in-part of Ser. No. WO 2002-US33894, filed on 23 Oct 2002, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-346250P	20011024 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 440
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to methods of resolving racemic amlodipine into enantiomerically enriched compositions by precipitation with **tartaric acid** in the presence of a non-aqueous solvent, such as N,N'-dimethylacetamide. The molar ratio of **tartaric acid**:amlodipine is preferably less than 0.25:1.0 or greater than 0.75:1.0.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 11 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2003:251917 USPATFULL
TITLE: Process for the preparation of [**S**(-) **amlodipine** - L (+)- hemitartarate]
INVENTOR(S): Joshi, Rohini Ramesh, Maharashtra, INDIA
Joshi, Ramesh Anna, Maharashtra, INDIA
Gurjab, M. K, Pune, INDIA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003176706	A1	20030918
APPLICATION INFO.:	US 2002-98502	A1	20020318 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Norman H. Stepno, Esquire, BURNS, DOANE, SWECKER & MATHIS, L.L.P., P.O. Box 1404, Alexandria, VA, 22313-1404
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
LINE COUNT: 157
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a process for the preparation of [**S**(-)**amlodipine**-L(+)-hemi taratarte] from RS amlodipine base using L(+) **tartaric acid** in the presence of dimethyl sulfoxide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 12 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2003:222183 USPATFULL
TITLE: Process for making **S**(-) **Amlodipine** salts
INVENTOR(S): Joshi, Rohini Ramesh, Pune, INDIA
Joshi, Ramesh Anna, Pune, INDIA
Gurjar, Mukund Keshav, Pune, INDIA

PATENT ASSIGNEE(S): Council of Scientific & Industrial Research, New Delhi, INDIA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6608206	B1	20030819
APPLICATION INFO.:	US 2002-283762		20021030 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Morris, Patricia L.
LEGAL REPRESENTATIVE: Luedeka, Neely & Graham PC
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 214
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for the preparation of **S**(-) **Amlodipine** salts which comprises reaction of **S**(-)**Amlodipine** base with a solution of pharmaceutically acceptable acid such as benzene sulfonic acid, oxalic acid, maleic acid, succinic acid and p-toluene sulfonic acid. The reaction is carried out in the presence of an organic solvent at room temperature. The organic solvents include alcohols like ethanol methanol 2 propanol hydrocarbons like toluene and polar solvent like dimethyl sulfoxide. The salt is obtained by addition of water and isolation of the salt formed by filtration. The unique feature of the invention is production of **S**(-) **Amlodipine** besylate in good chemical yield, high enantiomeric purity and with the quality required for preparation of pharmaceutical composition i.e. tablet formulation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 13 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2003:188528 USPATFULL
TITLE: Method of resolving amlodipine racemate
INVENTOR(S): Senanayake, Chris H., Danbury, CT, UNITED STATES
Tanoury, Gerald J., Hudson, MA, UNITED STATES
Wilkinson, Harold S., Marlborough, MA, UNITED STATES
Bakale, Roger P., Shrewsbury, MA, UNITED STATES
Zlota, Andrei A., Sharon, MA, UNITED STATES
PATENT ASSIGNEE(S): Sepracor, Inc., Marlborough, MA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003130321	A1	20030710
	US 6822099	B2	20041123
APPLICATION INFO.:	US 2002-325686	A1	20021220 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2002-US33894, filed on 23 Oct 2002, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-346250P	20011024 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
LINE COUNT: 491
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to methods of resolving racemic amlodipine into

enantiomerically enriched compositions by precipitation with **tartaric acid** in the presence of a non-aqueous solvent, such as N,N'-dimethylacetamide. The molar ratio of **tartaric acid**:amlodipine is preferably less than 0.25:1.0 or greater than 0.75:1.0.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 14 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2003:64724 USPATFULL
TITLE: Novel therapeutic agents for membrane transporters
INVENTOR(S): Jenkins, Thomas E., La Honda, CA, UNITED STATES
Christensen, Burton G., Alamo, CA, UNITED STATES
Griffin, John H., Atherton, CA, UNITED STATES
Judice, J. Kevin, El Granada, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003044845	A1	20030306	
APPLICATION INFO.:	US 2002-75017	A1	20020213	(10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-499176, filed on 7 Feb 2000, ABANDONED Continuation of Ser. No. US 1999-327096, filed on 7 Jun 1999, ABANDONED

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1998-88465P	19980608	(60)
	US 1998-93068P	19980716	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: THERAVANCE, INC., 901 GATEWAY BOULEVARD, SOUTH SAN FRANCISCO, CA, 94080
NUMBER OF CLAIMS: 63
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Page(s)
LINE COUNT: 5827
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel multi-binding compounds (agents) are disclosed which bind cell membrane transporters including ion channels, molecular transporters and ion pumps. The compounds of this invention comprise from 2 to 10 ligands each of which can bind to such cellular transporters to modulate the biological processes/functions thereof. Each of the ligands is covalently attached to a linker (framework) to provide for a multi-binding compound. The linker is selected such that the multi-binding compound exhibits increased modulation of the biological processes/functions of the transporter as compared to the aggregate of the individual ligand units made available for binding to the transporter.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 15 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2003:38384 USPATFULL
TITLE: Resolution of the enantiomers of amlodipine
INVENTOR(S): Xitian, Zhang, JiLin, CHINA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003028031	A1	20030206	
	US 6646131	B2	20031111	
APPLICATION INFO.:	US 2002-203615	A1	20020816	(10)
	WO 2000-CN538		20001208	

	NUMBER	DATE
PRIORITY INFORMATION:	CN 2000-12701	20000221

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: JACOBSON HOLMAN PLLC, 400 SEVENTH STREET N.W., SUITE 600, WASHINGTON, DC, 20004
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 191
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invitation provides an efficient method for the resolution of (R)-(+)-(formula (I)) and (S)-(-)(formula (II))-enantiomers of amlodipine, where the chiral reagent for resolution is **tartaric acid** and the chiral auxiliary reagent for resolution is deuterated dimethyl sulphoxide (DMSO-d6).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 16 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2002:141545 USPATFULL
TITLE: Methods of pharmacological treatment using **S** (-) **amlodipine**
INVENTOR(S): Foster, Robert T., Edmonton, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002072532	A1	20020613
	US 6476058	B2	20021105
APPLICATION INFO.:	US 2001-987661	A1	20011115 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-433963, filed on 4 Nov 1999, PATENTED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-107007P	19981104 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Charles H. Jew, Mary Ann Dillahunty, Esq., BURNS, DOANE, SWECKER & MATHIS, L.L.P., P.O. Box 1404, Alexandria, VA, 22313-1404
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
LINE COUNT: 975
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and compositions are disclosed utilizing the optically pure S(-) isomer of amlodipine. This compound is a potent drug for the treatment of hypertension while avoiding the concomitant liability of adverse effects associated with the administration of the racemic mixture of amlodipine. The S(-) isomer of amlodipine is also useful for the treatment of angina and such other conditions as may be related to the activity of **S**(-) **amlodipine** as a calcium channel antagonist without the concomitant liability of adverse effects associated with the racemic mixture of amlodipine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 17 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2002:85603 USPATFULL
TITLE: Therapeutic compositions comprising excess enantiomer
INVENTOR(S): Chahwala, Suresh Babubhai, Kent, UNITED KINGDOM

Dodd, Michael George, Kent, UNITED KINGDOM
Humphrey, Michael John, Kent, UNITED KINGDOM

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002045648	A1	20020418
	US 6887886	B2	20050503
APPLICATION INFO.:	US 2001-930330	A1	20010815 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	GB 2000-20842	20000823
	US 2000-237168P	20001002 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Gregg C. Benson, Pfizer Inc., Patent Department, Eastern Point Road, MS 4159, Groton, CT, 06340
NUMBER OF CLAIMS: 38
EXEMPLARY CLAIM: 1
LINE COUNT: 581
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is concerned with pharmaceutical compositions comprising a mixture of amlodipine enantiomers, which compositions have both anti-hypertensive and additional cardiovascular properties derived respectively from their calcium channel-blocking activity and their ability to release vascular nitric oxide (NO).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 18 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2001:235265 USPATFULL
TITLE: Methods of pharmacological treatment using **S** (-) **amlodipine**
INVENTOR(S): Foster, Robert T., Edmonton, Canada
PATENT ASSIGNEE(S): Isotechnika, INC, Edmonton, Canada (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6333342	B1	20011225
APPLICATION INFO.:	US 1999-433963		19991104 (9)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Criares, Theodore J.
ASSISTANT EXAMINER: Kim, Jennifer
LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, L.L.P.
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
LINE COUNT: 983
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and compositions are disclosed utilizing the optically pure S(-) isomer of amlodipine. This compound is a potent drug for the treatment of hypertension while avoiding the concomitant liability of adverse effects associated with the administration of the racemic mixture of amlodipine. The S(-) isomer of amlodipine is also useful for the treatment of angina and such other conditions as may be related to the activity of **S**(-) **amlodipine** as a calcium channel antagonist without the concomitant liability of adverse effects associated with the racemic mixture of amlodipine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 19 OF 24 USPATFULL on STN
ACCESSION NUMBER: 2000:41183 USPATFULL
TITLE: Separation of the enantiomers of amlodipine via their diastereomeric tartrates
INVENTOR(S): Spargo, Peter Lionel, Sandwich, United Kingdom
PATENT ASSIGNEE(S): Pfizer Inc., New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6046338		20000404	
APPLICATION INFO.:	US 1998-71810		19980505	(9)
RELATED APPLN. INFO.:	Division of Ser. No. US 704612			

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1994-5833	19940324

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rotman, Alan L.
LEGAL REPRESENTATIVE: Richardson, Peter C., Benson, Gregg C., Jones, James T.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
LINE COUNT: 372
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for the separation of R-(+)- and S-(-)-isomers of amlodipine (I) from mixtures thereof, which comprises the reaction of the mixture of isomers with either L- or D-**tartaric acid** in an organic solvent containing sufficient dimethyl sulphoxide (DMSO) for the precipitation of, respectively, a DMSO, solvate of an L-tartate salt of R-(+)-amlodipine, or a DMSO solvate of a D-tartrate salt of **S**-(-)-**amlodipine.**

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 20 OF 24 USPATFULL on STN
ACCESSION NUMBER: 1998:51780 USPATFULL
TITLE: Separation of the enantiomers of amlodipine via their diastereomeric tartrates
INVENTOR(S): Spargo, Peter Lionel, Sandwich, United Kingdom
PATENT ASSIGNEE(S): Pfizer Inc., New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5750707		19980512	
	WO 9525722		19950928	
APPLICATION INFO.:	US 1996-704612		19960918	(8)
	WO 1995-EP847		19950306	
			19960918	PCT 371 date
			19960918	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1994-5833	19940324

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rotman, Alan L.
LEGAL REPRESENTATIVE: Richardson, Peter C., Benson, Gregg C., Jones, James T.
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1,2
LINE COUNT: 343

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for the separation of R-(+)- and S-(-)-isomers of amlodipine (I) from mixtures thereof, which comprises the reaction of the mixture of isomers with either L- or D-**tartaric acid** in an organic solvent containing sufficient dimethyl sulphoxide (DMSO) for the precipitation of, respectively, a DMSO solvate of an L-tartrate salt of R-(+)-amlodipine, or a DMSO solvate of a D-tartrate salt of **S** -(-)-**amlodipine**. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 21 OF 24 USPAT2 on STN

ACCESSION NUMBER:	2003:188528 USPAT2		
TITLE:	Method of resolving amlodipine racemate		
INVENTOR(S):	Senanayake, Chris H., Danbury, CT, United States Tanoury, Gerald J., Hudson, MA, United States Wilkinson, Harold S., Marlborough, MA, United States Bakale, Roger P., Shrewsbury, MA, United States Zlota, Andrei A., Sharon, MA, United States		
PATENT ASSIGNEE(S):	Sepracor, Inc., Marlborough, MA, United States (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6822099	B2	20041123
APPLICATION INFO.:	US 2002-325686		20021220 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 2002-US33894, filed on 23 Oct 2002		
	NUMBER		DATE
PRIORITY INFORMATION:	US 2001-346250P		20011024 (60)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Desai, Rita		
LEGAL REPRESENTATIVE:	Ropes & Gray LLP		
NUMBER OF CLAIMS:	14		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)		
LINE COUNT:	442		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to methods of resolving racemic amlodipine into enantiomerically enriched compositions by precipitation with **tartaric acid** in the presence of a non-aqueous solvent, such as N,N'-dimethylacetamide. The molar ratio of **tartaric acid**:amlodipine is preferably less than 0.25:1.0 or greater than 0.75:1.0.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 22 OF 24 USPAT2 on STN

ACCESSION NUMBER:	2003:38384 USPAT2		
TITLE:	Resolution of the enantiomers of amlodipine		
INVENTOR(S):	Zhang, Xitian, N. 159 Remin Street, Changchun, JiLin, CHINA 130022		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6646131	B2	20031111
	WO 2001060799		20010823
APPLICATION INFO.:	US 2002-203615		20020816 (10)
	WO 2000-CN538		20001208

	NUMBER	DATE
PRIORITY INFORMATION:	CN 2000-102701	20000221

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Morris, Patricia L.
LEGAL REPRESENTATIVE: Jacobson Holman PLLC
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 184
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides a feasible method for the separation of both (S)-(-)-enantiomer and (R)-(+)-enantiomer of racemic amlodipine with higher optically purity. The chiral reagent for separation is **tartaric acid** and the chiral auxiliary reagent is hexadeuterium dimethyl sulphoxide (DMSO-d.sub.6).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 23 OF 24 USPAT2 on STN
ACCESSION NUMBER: 2002:141545 USPAT2
TITLE: Methods of pharmacological treatment using **S** (-) **amlodipine**
INVENTOR(S): Foster, Robert T., Edmonton, CANADA
PATENT ASSIGNEE(S): Isotechnika, Inc., Alberta, CANADA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6476058	B2	20021105
APPLICATION INFO.:	US 2001-987661		20011115 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-433963, filed on 4 Nov 1999, now patented, Pat. No. US 6333342

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-107007P	19981104 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Criares, Theodore J.
ASSISTANT EXAMINER: Kim, Jennifer
LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, LLP
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 984
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and compositions are disclosed utilizing the optically pure S(-) isomer of amlodipine. This compound is a potent drug for the treatment of hypertension while avoiding the concomitant liability of adverse effects associated with the administration of the racemic mixture of amlodipine. The S(-) isomer of amlodipine is also useful for the treatment of angina and such other conditions as may be related to the activity of **S**(-) **amlodipine** as a calcium channel antagonist without the concomitant liability of adverse effects associated with the racemic mixture of amlodipine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 24 OF 24 USPAT2 on STN

ACCESSION NUMBER: 2002:85603 USPAT2
TITLE: Therapeutic compositions comprising excess enantiomer
INVENTOR(S): Chahwala, Suresh Babubhai, County of Kent, UNITED KINGDOM
Dodd, Michael George, County of Kent, UNITED KINGDOM
Humphrey, Michael John, County of Kent, UNITED KINGDOM
PATENT ASSIGNEE(S): Pfizer Inc., New York, NY, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6887886	B2	20050503
APPLICATION INFO.:	US 2001-930330		20010815 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	GB 2000-20842	20000823
	US 2000-237168P	20001002 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Weddington, Kevin E.
LEGAL REPRESENTATIVE: Scully, Scott, Murphy & Presser
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 494
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is concerned with pharmaceutical compositions comprising a mixture of amlodipine enantiomers, which compositions have both anti-hypertensive and additional cardiovascular properties derived respectively from their calcium channel-blocking activity and their ability to release vascular nitric oxide (NO).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	50.86	51.07

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